

## Sample Surveying Studies and Sustainability on Education Buildings from the Ottoman Empire to the Republic Of Turkey

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### ABSTRACT

Most Of The Education Buildings Constructed During The Period Of The Ottoman Empire And The Republic Of Turkey Are Still Continuing Their Existence As The Buildings Serving For Benefit Of Education And Society. Even Though Originality Of Most Of Such Buildings Started To Deteriorate With Auxiliary Structures And Additions, There Are Some Examples Which Still Reflect The Characteristics Of Their Period. In Scope Of The Course Surveying 3 Included In The Curriculum Of Mimar Sinan Fine Arts University Architectural Restoration Program, Surveying Studies And Deterioration Analyses Have Been Performed On These Buildings Under The Execution Of Dr. Sibel Onat Hattap For The Purpose Of Documentation And Conservation When They Are Still Continuing Their Existence. Even Though Any Of These Education Buildings, Each Is A Cultural Asset, Loses Their Originality Or Begins Getting Lost, Restitution And Restoration Projects Shall Be Able To Be Performed By Means Of These Surveying Studies. By This Way, Sustainability Of Education Buildings Can Be Achieved. The Study Shall Be Composed Of Education Buildings On Which Surveying Studies Have Been Performed By Means Of Examples.

**Keywords** - Education Buildings, Surveying Studies, Conservation, Sustainability

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### I. INTRODUCTION

It Is Seen That Political And Ideological Ideas Are Highly Effective In Field Of Architecture During The Period Between 1920 And 1950 That Is Called As The Early Republican Period. The Education Buildings Having Been Taken Over From The Ottoman As A Result Of The Reforms Performed In Field Of Education During The Early Republican Period Started To Be Far From Meeting The New Requirements. The Education Institutions Which Had Become Inadequate And Remained Behind The Times During The Last Years Of The Empire Started To Be Reshaped In Direction Of Necessities Of The National Education Policy By The Republican Period. By Means Of The Revolutions And Reforms Carried Out, Some Schools Which Can Meet Such Requirements Have Been Constructed With State Budget Because The Architectural Structure Of Old Institutions Were Not Appropriate For New Models. New Structures Have Characteristics Adequate To Meet The New Requirements Arising From Fundamental Values Of The Republic In Architectural Sense. It Is Necessary To Examine Modifications Caused Occurred In The Education Institutions In Order To Study These Architectural And Structural Characteristics In More Detail.

Infants' Schools (Neighborhood Schools) Started To Be Replaced By Today's Primary Education Institutions And The Ottoman Junior High Schools (Rüştiye), Idadis And Sultanis Started

To Be Replaced By Today's High Schools And Darul Fununs And Madrassahs Started To Be Replaced By Today's Higher Education Institutions With The Republican Education System. Architectural Characteristics Of The Education Structure At Every Stage Are Different From Each Other, So It Will Be More Determinant To Evaluate Them Under Separate Topics [1]. The Most Significant Difference Of These New Education Structures From The Old Structures In Architectural Sense Is That They Have A Qualification That Would Allow Coeducation. Republic Has Some Ideological Fundamentals Which Eliminate Gender Discrimination, It Is Necessary To Act Collectively With All Sections Of The Population Without Doing Gender Discrimination In Order To Develop And Strengthen The Newly Established Republic Of Turkey. For That Reason, Some New Regulations Are Made In The Education System In Order To Ensure Women Having Education With Men. This Is The Most Important Structural Difference Of The New Education Buildings From The Old Ones. In Addition, Scientific Based And Applied Courses Have Been Particularly Placed Importance In Order To Develop The Country During The Early Republican Period. Foreigners Specialized In Their Field Have Been Invited To The Country, New Decisions Have Been Taken Based On The Reports They Had Given And Included In The Education System In This Direction. In Parallel With This, New Architectural Units Such As New Classrooms,

Laboratories Have Been Included In The New Education Structures Where Applied Courses May Be Given More Effectively [1]. In Addition To All These, Education Buildings Have Been Caused To Be Constructed By Successful Architects Of The Time Like Mimar Kemalettin Bey [2].

## II. ŞEMSİPAŞA PRIMARY SCHOOL

The Masonry School Located At Istanbul Province, Üsküdar District, Aziz Mahmut Hüdayi Sub-District, Ressam Ali Rıza Sokak No: 4, 376 Block, Parcel No 10 Is Composed Of A Basement, Ground Floor, And An Administrative Floor (1st Storey). The School Still Preserves Its Originality.



Figure 1. Şemsipaşa Primary School

### 1. Establishment (1731-1758)

Humbaracı Barracks Which Was Opened In 1731 Underlie The Şemsipaşa Primary School. This Barracks Was Opened On The Empty Land Located At The Outbuildings When The Former Ayazma Palace Was Desolate During The Period Of Mahmut I. After 3 Years (In 1734), Mühendishane-I Hümayun (Engineer School Of The Empire) Was Opened. Ayazma Mosque Was Built On The Location Of Demolished Ayazma Palace In 1758 And A School Named Ayazma Sıbyan Mektebi (Infants' School) Was Opened At The Location Of Mühendishane-I Hümayun.



Figure 2. Şemsipaşa Primary School Situation Plan

### 2. Establishment (1758-1842)

Şemsipaşa Primary School Was Turned Into A Infants' School By Sultan Mustafa III In 1758. This School Construction Of Which Had Been Started At The Same Date With Ayazma Mosque Was Firstly Named Ayazma Sıbyan Mektebi (Ayazma Infants' School). The Building Was A Two-Storey Stone Masonry Type Building With Wooden Facade. At The Entrance The Statement "Ayazma Sıbyan Mektebi Which Was Constructed By Mustafa Han III 1171" Is Written.

### 3. Establishment (1842-1913)

A School In The Name Of Üsküdar Mekteb-i İbtidaiyesi (Üsküdar Primitive School) Was Opened At The Same Building At The Location Of Ayazma Sıbyan Mektebi. This School Has Continued Its Existence Until 1913. Şeker Ahmet Pasha Graduated From This School.

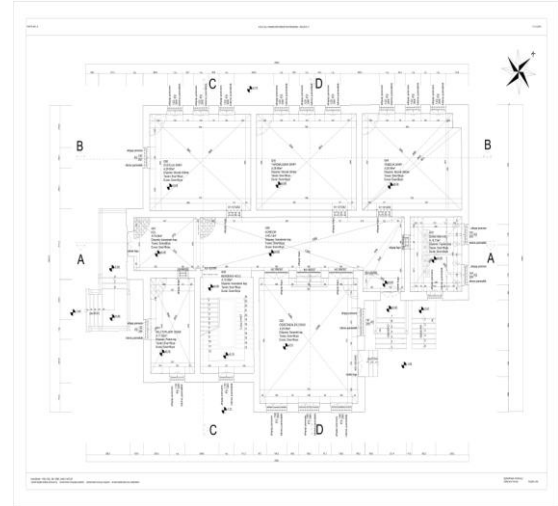


Figure 3. Şemsipaşa Primary School Plan Survey Work

### 4. Establishment (1913-Today)

The School Was Devastated After 71 Years (In 1913). The Chamberlain Of Sultan Mehmet V, Namely Mehmet Tevfik Bey Requested From Mehmet V When He Saw The Situation Of The School He Had Graduated And The Construction Of The School Was Started By 1913. The Minister Of Foundations Ürgüplü Mustafa Hayri Efendi Informed The Most Famous Architect Of The Time Kemaleddin Bey And Caused Kemaleddin Bey Constructed The Current Building Of The School. The Required Money Was Paid By Evkaf-I Hümayun (The Imperial Foundations). School.

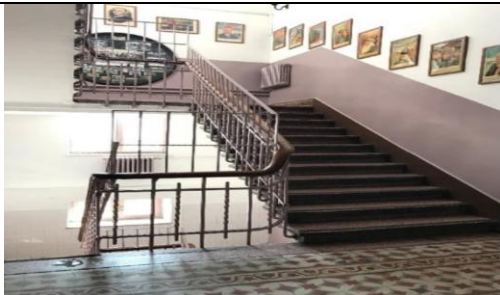


Figure 4. Şemsipaşa Primary School

### III. DETERIORATIONS AT THE BUILDING

Biological And Microbiological Deteriorations (Mouldings) Occurred On Walls At The South Facade Of The Building. Plaster Heat Change That Has Risen Once The Paint Layer That Protects The Facade Lost Its Function Has Become Open To Atmospheric Conditions Such As Rain, Wind Etc. And So It Has Been Abraded And Surface Loss And Cracks Occurred In Time. Wooden Windows Have Worn Of By The Impact Of Degradation Mechanisms. The Mechanical Deteriorations (Wears And Piece Breakages) Which Occurred On

The Stairs At The Section Of The Building Opening To The Garden Have Been Determined.



Figure 5. Deteriorations At The Şemsipaşa Primary School

### IV. FATİH COUNSELING AND RESEARCH CENTER (FORMER VEZNECİLER SCHOOL FOR IMPAIRED HEARING)

It Was Opened As The Beyazıt Mektebi (Beyazıt Shcool) After Conquest Of Constantinople. It Was Demolished And Reconstructed In 1923 And Its Name Was Changed As Beyazıt Girls School. Then, It Was Named As The Vezneciler Primary School In 1949. It Started To Serve As The Vezneciler Primary School For Impaired Hearing Beginning From 1980, And Has Been Serving As Fatih Counseling And Research Center Beginning From 02.02.2015 [3]. The Building Located On A Parcel With 3970 M<sup>2</sup> Area Is Seen As A Masonry School In Terms Of Its Nature.



Figure 6. Fatih Counseling And Research Center (Former Vezneciler School For Impaired Hearing)

### II.I. DETERIORATIONS AT THE BUILDING

The Building Is Partially In Good Conditions By Reason That It Is Still Used As A School. However, Paint And Plaster Shedding Occurred In Time On Wall Surfaces Below Windows And Door Sides On The North Facade Wall Because Of Dilapidation. Rain Water Caused Swellings, Deteriorations And Shedding On Paint And Plaster Probably Due To Water Guttering Or Maybe Due To Broken Tiles Are Seen Below Eaves On The Front Facade Of The Building.



Figure 7. Fatih Counseling And Research Center (Former Vezneciler School For Impaired Hearing) Situation Plan

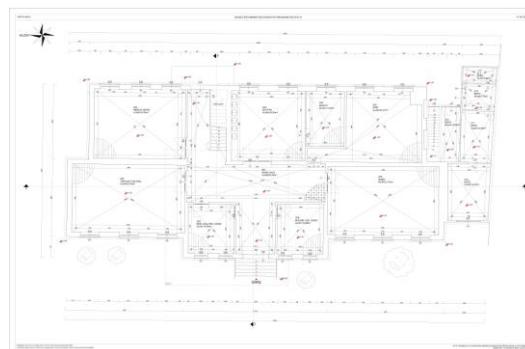


Figure 8. Fatih Counseling And Research Center (Former Vezneciler School For Impaired Hearing) Plan Survey Work

## V. CEZAYIRLI GAZI HASAN PAŞA PRIMARY SCHOOL

Cezayirli Gazi Hasanpaşa Is A Famous And Gallant Sailor Who Had Lived Between 1710–1790 And Served As A Grand Vizier During The Period Of Selim III From The Ottoman Emperors. The Said Pasha Caused Construction Of A Command Building For Himself After He Became A Chief Admiral. This Building Is The Current Primary School Building. This Historical Building Which Was Constructed Completely A Stone Structure Survived As A Command Building Until His Death. It Was Used As A Dervish Lodge For A Long Time During The Ottoman Period. Then, It Has Served As The Soup Kitchen Of The Army. The School Started To Give Education And Training In 1906. It Was Affiliated With The Ministry Of Education After Declaration Of The Republic And It Became A Primary School For 8 Years During The 1997-1998 Education Year That Had Been Previously A Primary School For 5 Years. It Has Become A Primary School Or 4 Years During The 2013-2014 Education Year Upon The Law Enacted By 2013 [4].



Figure 9. Cezayirli Gazi Hasan Paşa Primary School

Cezayirli Gazi Hasan Paşa Primary School Is Composed Of Two Buildings. Among The Buildings The One Entrance Of Which Is Facing To The Street Is The Main Building And The Other Building Has Been Constructed As Auxiliary To This Main Building. The Main Building Is 3-Storey And The Auxiliary One Is 4-Storey, But The Buildings Have Almost The Same Height Because The Ceiling Height Of The Main Building Is Considerably Higher Than The Other. The Auxiliary Building Has No Stairs System In Itself, All Storey Transitions Are Provided My Means Of The Main Building. For That Reason, It Is Not Possible To Enter In The Kindergartens From The Main Building. It Is Believed That Such A Convenience Was Applied In Order To Sterilize Kindergarten Students From Other Students.



Figure 10. Cezayirli Gazi Hasan Paşa Primary School Situation Plan

The Auxiliary Building (Addition) Was Constructed By Reinforced Concrete And The Main Building Was Constructed By Stone Material. When The Wall Thicknesses On The Main Building Are Examined, It Is Seen That Some Internal Wall Thicknesses Drops To 12 Cm, For That Reason It Is Understood That Some Additional Walls Have Been Constructed In Order To Ensure Functional Convenience In Some Sections Of The Building Because The Building Had Not Been Constructed As A School.

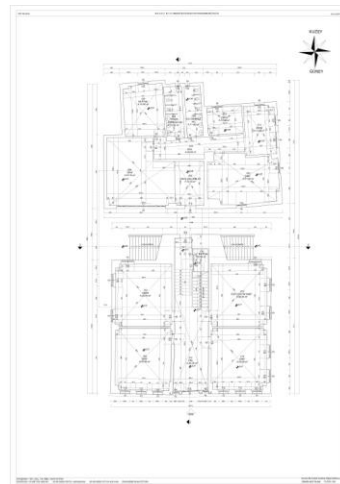


Figure 11. Cezayirli Gazi Hasan Paşa Primary School Plan Survey Work

### IV.I. DETERIORATIONS AT THE BUILDING

The Most Original Facade Of The Building Is The South Facade. An Epitaph, 12 Columns, 8 Arched Windows, 6 Flat Wooden Windows Still Preserve Their Originality On This Facade. However, The Door Of The Building Opening Towards The Street And The Windows Next To This Door Were Not Be Able To Continue Their Existence And Been Replaced By New Metal Door-Windows. Once The Paint Layer That Protects The Facade Loses Its Function, Plaster Heat Change That



Has Risen Once The Paint Layer That Protects The Facade Lost Its Function Has Become Open To Atmospheric Conditions Such As Rain, Wind Etc. And So It Has Been Abraded And Surface Loss And Cracks Occurred In Time.

## VI. CONCLUSION

In Scope Of The Course Surveying 3 Included In The Curriculum Of Mimar Sinan Fine Arts University Architectural Restoration Program, Many Education Buildings Have Been Studied And Their Surveying, Deterioration Analyses Have Been Performed Under The Execution Of Dr. Sibel Onat Hattap For The Purpose Of Documentation And Conservation When They Are Still Continuing Their Existence. However, Just Three School Buildings Are Included In This Study Based On The Architectural Significance, Additions And Functional Changes Of The Buildings. Existing Situation Of These Buildings Each Of Which Is A Cultural Asset Due To Their Specific Characteristics Has Been Determined With Surveying Studies. In Addition To These Surveying Studies, Surveying Reports And Deterioration Mechanisms Have Also Been Determined In Terms Of Their Continue Of Existence And Sustainability In Future. It Has Been Observed That Attention Had Been Taken For Periodical Maintenance Since The Education Service Is Still Ongoing In Most Of The Buildings, Nevertheless These Maintenance Works Remain Insufficient Because Construction Of Buildings Dates Back To A Long Time Ago. Additionally, It Is Seen That Additions Are Being Performed Because Of Increasing Requirements At The Present Time. Restitution And Restoration Projects Have Also Been Performed In Continuity Of The Studies, Some Reports Have Been Prepared In Order To Clear Them Off These Additions, And Protection And Maintenance Advices Have Been Provided Against Deterioration Mechanisms During Continuation Of The Studies.

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